

# Notice of Allowability

Application No.

10/720,795

Examiner

Carlos Amaya

Applicant(s)

BERTRAND, JEFFREY J.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 1/24/2003.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

## **DETAILED ACTION**

### *REASONS FOR ALLOWANCE*

The following is the examiner's statement of reasons for allowance. With respect to claim 1 Bourgeois (US 5,965,957) discloses "a plurality of control/monitor ports (input/output assembly 16); a plurality of input/output ports (second input/output assembly 18) and a control unit 36 for controlling the switch cards 20 to 30 of Figure 1. Bourgeois, however does not disclose expressly that " a first solid state switching device having a first input/output node coupled to a first input/output port of said output plurality of input/output ports, a second input/output node coupled to a second input/output port of said plurality of input/output ports, and a control node; a second solid state switching device having a first input/output node coupled to a third input/output port of said plurality of input/output ports, a second input/output node coupled to said second input/output port, and a control node coupled in common with the control node of said first solid state switching device; and a solid state switching device driver circuit having a first input node coupled to a first control port of said plurality of monitor/control ports, a second input node coupled to a second control port of said plurality of monitor/control ports, and an output node coupled to the control nodes of said first and second solid state switching devices, said driver circuit being operative, in response to the application of a voltage differential to said first and second control ports, to turn on each of said first and second solid state switching devices, and thereby provide a first current flow path between said first and second input/output ports, a second current flow path between said second and third input/output ports, and a third current flow path between said first

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and third input/output ports". Hazelton (US 6,759,851) discloses a circuit for monitoring an electric load 32; the circuit has solid-state switches 20 and 22, which connect the electrical system with the load in response to signals 16 and 18 generated by load drive controller 10 and external controller 7. However, Hazelton, does not meet the limitations of the switching device driver, and does not disclose the input/output ports, or the control/monitor ports or the connections of the solid state switching device with the input/output ports. It would have not been obvious to a person of ordinary skill in the art to combine the inventions disclosed by Bourgeois and Hazelton to obtain the disclosed invention.

With respect to Claim 6 Bourgeois (US 5,965,957) discloses "a plurality of control/monitor ports (input/output assembly 16); a plurality of input/output ports (second input/output assembly 18). Bourgeois, however does not disclose expressly that "a first solid state switching device having first input/output node coupled a first input/output port said output plurality input/output ports, second input/output node coupled to a second input/output port of said plurality input/output ports, and a control node, and a second solid state switching device having first input/output node coupled a third input/output port of said plurality of input/output ports, a second input/output node coupled to said second input/output port, and a control node coupled in common with the control node of said first solid state switching device; (b) coupling a load and a power source therefor to selected ones of said input/output ports; and (c) applying a voltage differential to first and second control ports of said plurality of control/monitor ports, so as to turn on each of said first and second solid state switching devices, and

thereby provide a current flow path through said first and second solid state switching devices, so as to place said load in circuit with said power source therefor by way of at least one of said first and second solid state switching devices and said selected ones of said input/output ports. Bourgeois, however, does not disclose the first nor the second solid state switching device and their respective nodes being connected to the input/output ports nor a control node couple in common with a control node of the first and second solid state switch. Bourgeois does not disclose that a voltage differential is applied to first and second control ports of said plurality of control/monitor ports, so as to turn on each of said first and second solid state switching devices along with the remaining limitations.

Hazelton, discloses a circuit for monitoring an electric load 32; the circuit has solid-state switches 20 and 22, which connect the electrical system with the load. However, does not disclose the input/output ports, or the control/monitor ports or the limitations of the claims. It would have not been obvious to a person of ordinary skill in the art to combine the inventions disclosed by Bourgeois and Hazelton to obtain the disclosed invention.

With respect to claim 13 Bourgeois (US 5,965,957) discloses "a plurality of control/monitor ports (input/output assembly 16); a plurality of input/output ports (second input/output assembly 18) and a control unit 36 for controlling the switch cards 20 to 30 of Figure 1. Bourgeois, however does not disclose expressly that " selected ones of the plurality of input/output ports are adapted to be coupled to a circuit path containing said load and said power source; a first solid state switching device having a first

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input/output node coupled to a first input/output port of said plurality of input/output ports, a second input/output node coupled to a second input/output port of said plurality of input/output ports, and a control node; a second solid state switching device having a first input/output node coupled to a third input/output port of said plurality of input/output ports, a second input/output node coupled to said second input/output port, and a control node coupled in common with the control node of said first solid state switching device; and a solid state switching device driver circuit having a first input node coupled to a first control port of said plurality of monitor/control ports, a second input node coupled to a second control port of said plurality of monitor/control ports, and an output node coupled to the control nodes of said first and second solid state switching devices, said driver circuit being operative, in response to the application of a voltage differential to said first and second control ports, to turn on each of first and second solid state switching devices, and thereby provide a current flow path through at least one said first and second solid state switching devices and said circuit path containing said load and said power Source".

Hazelton, discloses a circuit for monitoring an electric load 32; the circuit has solid-state switches 20 and 22, which connect the electrical system with the load. However, does not disclose the input/output ports, or the control/monitor ports or the limitations of the claims. It would have not been obvious to a person of ordinary skill in the art to combine the inventions disclosed by Bourgeois and Hazelton to obtain the disclosed invention.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "comments on statement of reasons for allowance."



**PHUONG T. VU**  
SENIOR EXAMINER